

## **REMARKS**

### **I. Introduction**

With the addition of new claims 25 and 26, claims 11 to 15, 25 and 26 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

### **II. Rejection of Claims 11 to 14 Under 35 U.S.C. § 103(a)**

Claims 11 to 14 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of U.S. Patent No. 2002/0060152 ("Hotta et al.") and U.S. Patent No. 5,368,713 ("Frieze et al."). It is respectfully submitted that the combination of Hotta et al. and Frieze et al. does not render unpatentable the present claims for at least the following reasons.

Claim 11, as amended, relates to a measuring sensor for determining a physical property of a measured gas, including, a sensor element capable of being exposed to the measured gas, the sensor element includes a ceramic element made of solid electrolyte layers, an outer electrode situated on a surface of the ceramic element, and a porous protective lining coating the outer electrode, and a protective layer at least partially coating the sensor element, the protective layer protecting against a harmful component in the measured gas, the protective layer covering the porous protective lining, wherein the protective layer includes one of highly active  $\gamma$ -aluminum oxide ( $\text{Al}_2\text{O}_3$ ) and highly active  $\delta$ -aluminum oxide ( $\text{Al}_2\text{O}_3$ ), the aluminum oxides having additives of one of the alkaline metals group, the alkaline earth group, the IV B subgroup, and the lanthanides group, wherein a material of the protective lining includes zirconium oxide ( $\text{ZrO}_2$ ) having a small proportion of aluminum oxide ( $\text{Al}_2\text{O}_3$ ), wherein the protective layer has a substantially higher proportion of aluminum oxide than the protective lining, and *a porous adhesive layer covering the protective lining, wherein a material of the adhesive layer includes zirconium oxide ( $\text{ZrO}_2$ ) having a proportion of aluminum oxide ( $\text{Al}_2\text{O}_3$ ).* Support for this amendment may be found, for example, on page 3, lines 12 to 21 of the Specification, and in Figure 4.

Neither Hotta et al. nor Frieze et al. discloses, or even suggests, the feature of *a porous adhesive layer covering the protective lining, wherein a material of the adhesive layer includes zirconium oxide ( $\text{ZrO}_2$ ) having a proportion of*

*aluminum oxide (Al<sub>2</sub>O<sub>3</sub>)*. While Hotta et al. may disclose an electrode protective layer 13 (which the Examiner alleges discloses the protective lining of the present claims) and a catalytic layer 14, nowhere does Hotta et al. disclose, or even suggest, *a porous adhesive layer covering the protective lining*, let alone the feature that *a material of the adhesive layer includes zirconium oxide (ZrO<sub>2</sub>) having a proportion of aluminum oxide (Al<sub>2</sub>O<sub>3</sub>)*. Friese et al. does not cure these deficiencies.

As such, it is respectfully submitted that the combination of Hotta et al. and Friese et al. does not render unpatentable claim 11.

As for claims 12 to 14 which depend from claim 11 and therefore include all of the features included in claim 11, it is respectfully submitted that the combination of Hotta et al. and Friese et al. does not render unpatentable these dependent claims for at least the same reasons more fully set forth above.

In view of all the foregoing, withdrawal of this rejection is respectfully requested.

### **III. Rejection of Claims 11 to 15 Under 35 U.S.C. § 103(a)**

Claims 11 to 15 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of U.S. Patent No. 2003/0230484 (“Jain et al.”) and Friese et al. It is respectfully submitted that the combination of Jain et al. and Friese et al. does not render unpatentable the present claims for at least the following reasons.

Jain et al. does not disclose, or even suggest, the feature of *a porous adhesive layer covering the protective lining, wherein a material of the adhesive layer includes zirconium oxide (ZrO<sub>2</sub>) having a proportion of aluminum oxide (Al<sub>2</sub>O<sub>3</sub>)*. While Jain et al. may disclose a first protective coating 24 (which the Examiner alleges discloses the protective lining of the present claims) and a second protective coating 23, nowhere does Jain et al. disclose, or even suggest, *a porous adhesive layer covering the protective lining*, let alone the feature that *a material of the adhesive layer includes zirconium oxide (ZrO<sub>2</sub>) having a proportion of aluminum oxide (Al<sub>2</sub>O<sub>3</sub>)*. As mentioned above, Friese et al. does not cure these deficiencies.

As such, it is respectfully submitted that the combination of Jain et al. and Friese et al. does not render unpatentable claim 11.

As for claims 12 to 15 which depend from claim 11 and therefore include all of the features included in claim 11, it is respectfully submitted that the

combination of Jain et al. and Friese et al. does not render unpatentable these dependent claims for at least the same reasons more fully set forth above.

In view of all the foregoing, withdrawal of this rejection is respectfully requested.

#### **IV. Rejection of Claims 11 to 15 Under 35 U.S.C. § 103(a)**

Claims 11 to 15 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of U.S. Patent No. 5,271,821 ("Ogasawara et al.") and U.S. Patent No. 4,296,148 ("Friese et al."). It is respectfully submitted that the combination of Ogasawara et al. and Friese et al. does not render unpatentable the present claims for at least the following reasons.

Ogasawara et al. does not disclose, or even suggest, the feature of a *porous adhesive layer covering the protective lining, wherein a material of the adhesive layer includes zirconium oxide ( $ZrO_2$ ) having a proportion of aluminum oxide ( $Al_2O_3$ )*. While Ogasawara et al. may disclose a lower porous protective layer 6 (which the Examiner alleges discloses the protective lining of the present claims) and upper porous protective layer 7, nowhere does Ogasawara et al. disclose, or even suggest, *a porous adhesive layer covering the protective lining*, let alone the feature that *a material of the adhesive layer includes zirconium oxide ( $ZrO_2$ ) having a proportion of aluminum oxide ( $Al_2O_3$ )*. Friese et al. does not cure these deficiencies.

As such, it is respectfully submitted that the combination of Ogasawara et al. and Friese et al. does not render unpatentable claim 11.

As for claims 12 to 15 which depend from claim 11 and therefore include all of the features included in claim 11, it is respectfully submitted that the combination of Ogasawara et al. and Friese et al. does not render unpatentable these dependent claims for at least the same reasons more fully set forth above.

In view of all the foregoing, withdrawal of this rejection is respectfully requested.

#### **V. New Claims 25 and 26**

Claims 25 and 26 have been added herein. New claims 25 and 26 do not add any new matter and are fully supported by the present application, including, the Specification. Claims 25 and 26 ultimately depend from claim 11, and are therefore allowable for at least the same reasons as claim 11.

**VI. Conclusion**

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

Dated: January 31, 2011

By: /Clifford A. Ulrich/  
Clifford A. Ulrich, Reg. No. 42,194 for:  
Gerard A. Messina (Reg. No. 35,952)

KENYON & KENYON LLP  
One Broadway  
New York, NY 10004  
**CUSTOMER NO. 26646**